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After a few remarks from the Chairman and Mr. Mackenzie, Mr. ALFRED HIGGINS said he considered the paper most interesting, as it treated of a great peculiarity in the formation of the condyles. It was known to be not unusual in Indian skulls, though, to speak positively of the extent to which it prevails, would require a larger collection of specimens than had yet been made. The present one was the fullest development of the phenomenon he had seen.

The following paper by Mr. Groom Napier was then read :—

*On the Proportion that Numbers of the Sexes of Offspring bear to the Ages of Parents.* By C. O. GROOM NAPIER, F.G.S., F.A.S.L.

I have been for a length of time collecting statistics, with a view to ascertain the proportion of male births to that of female, in relation to the ages of their respective parents. Saddler in England, and Hofacker on the Continent, have worked at this subject, and their researches seem to establish that the predominance of age in either parent tends to the production of offspring of its own sex in proportionate numbers. Their extent of facts and conclusions are less detailed than mine, and do not lead to the belief that predominance of age has only this significance, when it is the accompaniment of physical vigour. I will state the result of my investigations, which are mainly drawn from facts gathered from the family statistics recorded in the peerages and baronetages of the United Kingdom.

TABLE SHOWING THE PROPORTION OF THE SEXES.

*Proportion of Male to 100 Female Births.*

	Per Cent.
390 Parents of equal age .....	91·8
276 Fathers one year older than the mothers.....	101·3
312 „ two to three years older.....	101·8
211 „ four to six years older.....	108·0
200 „ from six to ten years older .....	130·1
168 „ from ten to sixteen years older.....	144·3
120 „ from seventeen to twenty-five years ...	189·7
80 „ from twenty-six to thirty-two years ...	125·6
45 „ from thirty-three to forty years older...	112·6
18 „ from forty to fifty (mothers under 25)...	115·4
13 „ from forty to fifty (mothers above 25)...	91·6

*Mothers Older than Fathers.*

88 From one to three years older.....	94·3
77 From three to five years older .....	88·8
66 From five to ten years older.....	77·1
43 From ten to fifteen years older .....	60·6
17 From fifteen to twenty-two years older.....	48·3

The number of instances of marriage between males from one to five years older than the females is very great, it is, therefore easy to obtain a large array of figures from which to form deductions. The number of cases is much less when the father is many years older than the mother ; and is still smaller when the mother is many years older than the father. I had great difficulty in obtaining the few cases on which my statistics are in this case based. It would appear that the proportion of male births continues to rise until it reaches 189 males to 180 females in the case of fathers from seventeen to twenty-

five years older than the mothers. A greater preponderance of age of the fathers over the mothers showed a smaller proportion of male births; probably from diminished physical vigour in consequence of age in the male parent. This was especially seen in the cases quoted of 18 fathers from forty to fifty years older than mothers under twenty-five years of age, which gave 115 male to 100 female births. This percentage increased in the 13 fathers forty or fifty years older than mothers above twenty-five, where the proportion was 91·6 male to 100 female births. I believe that a larger series of facts would give an even larger balance in favour of the female sex. If the preponderance of age in male parents is favourable to a larger proportion of male over female births; that of females over males is also favourable for a similar increased proportion in female births. Thus mothers from one to three years older than fathers gave a proportion of 94·3 male to 100 female births. Mothers from three to five years older than fathers gives a percentage of 88·8 males to 100 females. The proportion continues to increase until it reaches according to the small array of facts I lay before you the greatly diminished rate of 48·3 male to 100 female births; but in this case the mothers are from fifteen to twenty-two years older than the fathers.

MR. BRABROOK considered there was a good deal of excellence in the paper, though, from our being unaccustomed to deal here with questions involving averages and proportions, it was, perhaps, better suited for the Statistical than for the Anthropological Society. Nevertheless there was a question at the bottom of that paper that did concern this Society, and he did not doubt that had the author been present to add some further explanation much greater advantage might have been derived from it. The statistics were taken from the peerages in which there would probably be several omissions and additions; and, though this might occasion a balance of errors amounting to truth, it did not always happen so, and he did not like such evidence. For example, it was likely that the female births would be often omitted as of less importance from their not affecting hereditary property; and, for this and other reasons, he considered that the peerages did not afford good data upon which to base calculations. At the same time much credit was due to the author for entering a new path which was quite open to inquiry, even though it was impossible to say how far the statistics before them went towards the settlement of the question.

THE CHAIRMAN remarked that, with regard to the paper itself, the principle it contained was certainly borne out by known facts, such as the proportion between males and females born being 104 to 100. In no country were the males born fewer than the females, yet females predominate. When persons of the same age married the proportion of males born was 101·3 to 100 females, or nearly equal. The paper was remarkable as shewing what difference in age produced the greatest difference in proportion, together with the limits on both sides. Where the male was seventeen to twenty-five years older—provided that the mother was under twenty-five—the proportion of male births was shown to be 189 to 100, or nearly two to one. This was a practical point, and

specially interesting to the aristocracy. Nothing had been said about illegitimate children, though many persons thought them superior, and he pointed to William the Conqueror as a notable example, while others were of an exactly contrary opinion. The subject was most interesting and suggestive, and when procreation became a science, as it certainly would do in course of time, great importance would be attached to such papers as the present.

Rev. DUNBAR HEATH was much pleased with the paper, but he thought in considering the proportions of the sexes it should be remembered that no mention had been made of the number of still-born children, without which it could not be correct. It was very desirable to search for the law upon which depended the relative numbers of the sexes. Why should not anybody who kept domestic animals, such even as cocks and hens, take notice of the proportions of males and females produced by them? Any farmer or country gentleman might easily make such observations. For example, as with ewes and rams, there were many instances in which nature required but one male to many, perhaps even 100, females. Now was it the case that with one ram to 100 ewes there were 99 of the latter born to one of the former? He could not say—but as human beings were under the same law in regard to bones and muscles as other mammals, it might be advantageous to pursue such investigations. He would ask physiologists what was the exact day—hour even—during the period of gestation when sex was first traceable in the embryo, and whether it was possible to effect a change a day or two before that period? Had anyone suggested *causes* for any of these phenomena?

Mr. BRABROOK mentioned as a curious fact that of illegitimate children there were 105 girls born to 100 boys, which is precisely the same proportion as that of girls to boys in legitimate births.

The CHAIRMAN suggested that that was, perhaps, due to the greater age of the mothers in such cases.

Dr. HUNT considered the paper presented an interesting and important field for inquiry. It was his desire to encourage such papers, though in the present one they had not been given sufficient facts and tables for the purpose of arriving at any definite conclusions. With regard to the Rev. Dunbar Heath's remarks, the author had mentioned that rats follow the same law. Could such facts be established they would be capable of most practical application, and he was certain that if the author had been present his further explanation of the subject would have done much to advance the science of anthropology.

Mr. LAMPFRAY thought the principle laid down in the paper exceedingly truthful, and turning the subject over in his mind he had cast about among the families of his acquaintance and could mention a dozen instances of there being families of boys where the father was older than the mother, and families of girls when the reverse was the case.

Dr. HUNT announced that there were two other papers by Mr. G. Napier which had been intended for that evening, but as it would be necessary to continue the meeting to a very late hour if they were

read, he proposed that they should be postponed to a future day when the author might be present.

The meeting then adjourned.

MARCH 5TH, 1867.

T. BENDYSHE, Esq., M.A., V.P., IN THE CHAIR.

THE minutes of the last meeting were read and confirmed.

The following members were elected :—John Ferguson, Esq., 19, Mecklenburgh Square ; Dr. Patey, Ripon ; Washington Downing, Esq., 29, Cumming Street, Pentonville.

*Corresponding Member*.—Professor Jeffries Wyman, Boston, United States.

*Local Secretary*.—Stephen Webb, Esq., M.D., 23rd Royal Welsh Fusiliers, for Jubbulpore, Deccan.

The following presents were received, and thanks voted for the same :—

THE MUSEUM.

From H. G. Williams, Esq., F.A.S.L.—Stone axe from the Madera River, Brazil.

THE LIBRARY.

From the Author.—New Readings of the Motto of the Prince of Wales. By Dr. W. BELL.

From T. Bendyshe, Esq., M.A., V.P. A.S.L.—Works of Apollonius of Tyana. By ALBERT REVILLE.

Treasury of Botany. By MOORE and LINDLEY.

Treasury of Bible Knowledge. By Rev. J. AYRE.

Biographical Treasury. By S. MAUNDER.

Popular Account of Australia.

Last Words of Eminent Persons. By JOSEPH KAINES.

History of Slavery in Massachusetts. By G. H. MOORE.

School Atlas of Classical Geography. By KEITH JOHNSTON, Esq.

On Democracy. By J. H. PARTRIDGE, Esq.

Life of General T. J. Jackson. By DABNEY.

Prometheus Bound of Æschylus. By A. WEBSTER.

α K. R. H. Mackenzie, Esq., F.A.S.L.—Woman and Her Wants. By Madame CAPLIN.

The Comet. By Captain MORRISON.

Christian Mythology Unveiled. By ANONYMOUS.

Catalogue of Egyptian Antiquities. By Sir CHARLES NICHOLSON.

Cutaneous Diseases. By JOHN WILSON.

Dr. HUNT announced that they had received from the Belgian Minister of the Interior, in reply to a letter addressed to him, a communication, which would be read.

The CHAIRMAN explained that the Society had expended several sums in promoting the investigation of certain remains in Belgium, which had, or were thought to have, an important bearing on the an-